

**Comparing Pre-test and Post-test Self-Efficacy Ratings of Participants Attending The  
Executing With Excellence Conference**

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## Introduction/Need for the Study

Research has shown that leadership skills are one of the soft-skills that employers are seeking in their employees (Crawford et al., 2011). Leadership is one of the skills FFA purports to foster in its members through a variety of different opportunities (National FFA Organization, 2018). In Texas one of these opportunities to gain leadership skills is by attending one of three “Excellence Conferences” according to their high school classification. The Executing With Excellence Conference is designed for senior FFA members and has only been in existence for two years (personal communication, 2020) and therefore no research exists as to whether or not it is effective in accomplishing the 13 objectives set for the conference. This study which aligns with Priority Three of the American Association of Agricultural Educators Research Agenda (Roberts et al., 2016) was designed to analyze the effectiveness of the conference by comparing the pre-test and post-test self-efficacy scores of its participants.

## Theoretical Framework

According to Bandura (1977) self-efficacy is a person’s belief that they can accomplish a task or behavior. This study used Bandura’s Self-Efficacy Theory to guide this study and therefore used the self-efficacy of the participants to analyze the effectiveness of the conference. A limitation of this theory was that participant’s self-efficacy or belief they can accomplish a task does not necessarily indicate they can actually do a task but this theory can show whether ones belief that they can accomplish a task has changed. Measuring a change in self-efficacy can show whether or not a conference was effective in accomplishing its’ objectives and therefore was chosen to guide this study.

## Methodology

A pre-test and post-test design was used for this research study. Over the course of four months, seven different Executing With Excellence Conferences were conducted at seven different locations across Texas. These conference locations were chosen in different regions of the state to encourage members from all parts of the state to attend (personal communication, 2020). The curriculum for this conference included 13 objectives (which were determined the presenters) and each of the conferences had one or two of the three trained presenters to conduct the conference. A pre-test and post-test was designed by the researchers to assess participants’ self-efficacy in each of the 13 objectives. This was accomplished with a Likert-type scale ranging from 1 = Strongly Disagree to 6 = Strongly Agree. All 127 participants assessed their self-efficacy in each objective before the conference and then again at the conclusion of the conference. A paired-samples t-test was used to compare the means of each objective from the pre-test to the post-test. The significance was set at  $p < .05$  *a priori*. Statistical Package for the Social Sciences (SPSS) version 25 was utilized to calculate means, standard deviation and conduct the t-test.

## Results/Findings

A statistically significant difference in the means of the pre-test and post-test self-efficacy scores were found in all 13 objectives. The most significant difference was seen in “I am able to

describe the intent of interviewers' questions" ( $t = -13.988$ ) and the least significant difference was in "I can list my participation in FFA and high school." ( $t = 4.146$ ) (See Table 1). The second lowest difference was noticeably higher ( $t = -9.044$ ) and was for the statement "I can identify what makes me the best version of myself."

Table 1.  
*A Comparison of Pre-Test and Post Test Students Self-Efficacy (N = 127)*

Variable	Pre-Test		Post-Test		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I can list my participation in FFA and high school.	5.58	0.556	5.78	0.453	-4.146	.000
I am able to differentiate between experiences and skills.	5.03	0.776	5.82	0.426	-11.332	.000
I am able to describe the intent of interviewers' questions	4.48	0.942	5.70	0.582	-13.988	.000
I am able to create a message based on skills obtained through experiences.	4.59	0.954	5.62	0.692	-12.018	.000
I can articulate "verbal" messages based on the audience.	4.51	1.061	5.50	0.641	-11.410	.000
I can articulate "written" messages based on the audience.	4.43	1.043	5.50	0.665	-12.301	.000
I can define the concept of "humble confidence"	4.74	1.017	5.80	0.455	-11.468	.000
I can implement the concept of "humble confidence"	4.65	1.003	5.77	0.522	-12.074	.000
I can identify what makes me the best version of myself.	4.91	0.904	5.64	0.651	-9.044	.000
I can establish expectations for growth and lifelong learning.	4.98	0.797	5.72	0.559	-10.071	.000
I can categorize the time, talent, and/or treasures I have to give.	4.73	0.830	5.70	0.568	-12.021	.000
I can explain why I should invest in myself and others	4.83	0.949	5.76	0.515	-11.255	.000
I can compare and contrast ways I can invest in myself and others.	4.64	1.067	5.70	0.539	-11.726	.000

*Note:* 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, 6 = Strongly Agree;

### Conclusions/Implications/Recommendations

Since all 13 objectives showed a statistically significant difference between pre-test and post-test scores of self-efficacy, it can be concluded that the conference was effective in accomplishing its objectives. One must take notice that one statement showed a significantly lower difference but this is also the objective the participants scored the highest on during the pre-test so there was not as much room for change to occur within this objective. Recommendations for practice are to continue this conference as it has been successful in increasing participant's self-efficacy in all 13 objectives. Recommendations for research are to continue this study in order to gain a larger sample of participants which will add to the rigor of the study. Further research could also explore correlations between change in self-efficacy and demographics of participants as well as demographics of the presenters. This could explore questions such as, "Does the gender of the presenter impact the effectiveness of the conference?" and "Does ethnicity of participants impact their change in self-efficacy?"

## References

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. doi:10.1037/0033-295x.84.2.191
- Crawford, P., Lang, S., Fink, W., Dalton, R., & Fielitz, L. (2011). *Comparative analysis of soft skills: What is important for new graduates?* Retrieved from [http://www.aplu.org/members/commissions/food-environment-and-renewable-resources/CFERR\\_Library/comparative-analysis-of-soft-skills-what-is-important-for-new-graduates/file](http://www.aplu.org/members/commissions/food-environment-and-renewable-resources/CFERR_Library/comparative-analysis-of-soft-skills-what-is-important-for-new-graduates/file)
- National Research Council. (2012). *Education for life and work: Developing transferable knowledge and skills in the 21<sup>st</sup> century*. Washington, DC: The National Academy Press.
- Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). *American Association for Agricultural Education National Research Agenda: 2016-2020*. Gainesville, FL: Department of Agricultural Education and Communication